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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,403	08/27/2001	Jochen Antkowiak	2345/162	5116

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EXAMINER	
GOSHTASBI, JAMSHID	
ART UNIT	PAPER NUMBER
2637	

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/914,403	ANTKOWIAK ET AL.	
	Examiner	Art Unit	
	Jamshid Goshtasbi-G.	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 August 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *08/27/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 9-16 are pending in the application.

Drawings

2. The drawings are objected to because numeral reference numbers should be used along with the descriptive language to identify each element of the drawings. The specification must be amended to reflect any change made. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(e) BACKGROUND OF THE INVENTION.
(1) Field of the Invention.
(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(f) BRIEF SUMMARY OF THE INVENTION.
(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(h) DETAILED DESCRIPTION OF THE INVENTION.
(i) CLAIM OR CLAIMS (commencing on a separate sheet).
(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if

the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The limitations recited in Claim 9, lines 3-9 do not have antecedent basis in the specification. The same comment applies to Claim 9, lines 2-10 and Claim 14, lines 10-18.

5. What does it mean by "special signal improvements" and "standard conversion" recited in claims 9 (lines 11-12), 10 (line 8), and 15 (last two lines)?

6. The disclosed specification makes reference to claims (see page 3, lines 10-15, for instance). Such reference to claim in the description should be removed.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 9, 10, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9 and **15** recite the feature "signal improvement ...with respect to the data format..." which does not have a generally accepted significance. The disclosed

specification describes "signal improvement" including a format conversion (page 4, lines 28-34). It is not clear, however, according to which parameters in the conversion of the signal format a "signal improvement" is to occur.

In **Claim 10**, the term "improvable" is a relative term which renders the claim indefinite. The term "improvable" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is not clear what parameters and to what extent make the quality of signals improvable.

Claim Rejections – 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 9 -16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makiyama et al. (US 5640198) in view of Bergmann et al. (US 5941953).

As to **Claim 9**, Makiyama et al. discloses an image-information control device that provides for a method for transmitting digitized broadband data which are suppliable by various sources for retransmission, and which are selectable by a user via a reverse channel (figures 4 and 6 and the corresponding description in col. 5, lines 23-60 and col. 6, lines 5-39), wherein first performing signal analysis on source signals

(first, a communication capability is negotiated; Col. 6, lines 47-51), and, if necessary (in the terminal using QCIF data; col. 5, lines 54-55), converting a data format of the source signals (col. 5, lines 48-15); further, comparing the source signals to a quality measure (capability of the receiving terminal; col. 7, line 8) before the retransmission, and performing a signal improvement on inferior quality signals with respect to the data format and errors of the source signals (col. 4, lines 25-33; col. 6, lines 53-65; col. 7, lines 44-52).

. However, Makiyama et al. is silent on the comparing the source signals to a quality measure, wherein the quality measure is demanded by the user who selects it.

In disclosing a method for simultaneous digital processing of a plurality of data packets, however, Bergmann et al. teaches comparing the source signals (data packets of various endpoints; col. 3, line 40) to a quality measure demanded (an access request demanded) by the user (Abstract: when a data packet is to be transmitted from one device (source signal) to another device (user), an event or a request is generated, which is evaluated by an event module, which then selects the corresponding endpoint modules and establishes a logical link between these endpoint modules; the system reacting to the demands (requests) from the user level by arranging appropriate access; col. 1, lines 65-67; col. 3, lines 15-23; col. 4, lines 63-67; col. 5, lines 1-5; col. 7, lines 8-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Bergmann et al. into the method of Makiyama et al. for producing the claimed invention because incorporating

this feature provides for the level of signal improvement required to meet the user's demand.

Claim 10 inherits the limitations of Claim1. Further, Makiyama et al. discloses demultiplexing multiplexed data streams to demultiplexed signals, if necessary (in case of; col. 5, lines 48-60) before performing the signal analysis; and multiplexing the demultiplexed signals (col. 6, lines 51-57; col. 7, 31-34). All other features of the claim correspond with (and are similarly as) subject matter mentioned in the rejection of Claim 9 above, applicable hereto.

Claim 11 inherits all the limitations of Claim 9. Further, Makiyama et al. discloses processing at least one of video signals, digital signals, measurement signals, and sound signals (col. 1, lines 8-14; col. 5, lines 10-20).

Claim 12 inherits all the limitations of Claim 9. Further, Makiyama et al. discloses signal analysis being switchable by a subscriber (user terminal) via the reverse channel (col. 5, lines 35-46).

Claim 13 inherits all the limitations of Claim 9. Further, Makiyama et al. discloses decisions on the signal analysis being from a table. (col. 6, lines 57-60).

Claim 14 inherits all the limitations of Claim 9. However, Makiyama et al. is silent about converting the signal format for a return path for a bidirectional signal transmission. Bergmann et al., however, discloses a bidirectional signal transmission (sending/receiving A/V data; col. 2, lines 47-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the

teachings of Bergmann et al. into the method of Makiyama et al. for producing the claimed invention because converting the signal format for a return path would be required for bidirectional signal transmission applications.

As to **Claim 15**, all recited features of the claimed system for transmitting digitized, broadband data, which are suppliable by various sources for retransmission and which are selectable by a user via a reverse channel, correspond with (and are similarly as) subject matter mentioned in the rejection of claims 9 and 10 above, applicable hereto.

Claim 16 inherits all the limitations of Claim 15. Further, Makiyama et al. discloses a control device coupled to the demultiplexer arrangement (figures 4 and 7; col. 6, lines 41-46 and 51-53).

Other prior art cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kajitani et al. (US 5581735) discloses a system for supplying unit image data to requesting users from multiple storage devices.

Shiojiri et al. (US 5550589) discloses a method of adaptively multiplexing a plurality of video channel data information obtained from a look-up table.

Amaral et al. (US 6088360) discloses a dynamic rate control technique for video multiplexing.

Shimoda (US 5754553) discusses a packet conversion apparatus and system

that includes converting the transmission packet format into a prescribed recording packet format.

Contact information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamshid Goshtasbi-G., whose telephone number is (571) 272-3012. The examiner can normally be reached on M-F 8:00/4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jamshid Goshtasbi-G.
Examiner
Art Unit 2637

JEAN B. CORRIELUS
PRIMARY EXAMINER
11-10-04